

Hazardous Waste Siting Response:

Questions on the Michigan Siting Process

What is a hazardous waste management facility?

A hazardous waste management facility is a plant or location that is specially designed to handle hazardous waste from various industries. Waste is treated, incinerated, landfilled, or stored in tanks or containers. The hazardous waste law requires that facilities must be designed and operated to prevent leaks or spills, must be monitored, and must not endanger public health and safety.

How do hazardous waste management facilities work?

Treatment facility: Makes the waste less hazardous or not hazardous. Usually done by chemical or biological methods in tanks or containers in an enclosed building; air emissions are controlled.

Incinerator: Burns the wastes in a specially designed furnace at high temperature to destroy them. The burner is an enclosed drum with controls on the burning and on gases given off.

Landfill: Waste is buried in an underground vault built to prevent leakage from bottom or sides. The waste is covered with a leakproof final cover and the site is securely fenced.

What are hazardous wastes?

Hazardous wastes are discarded materials that can be harmful if not handled safely and carefully. There are four types:

Corrosive wastes can dissolve metals or burn skin; these are strong acids or caustics

Toxic wastes are poisonous; includes pesticides, metal sludges, wastes from making plastics

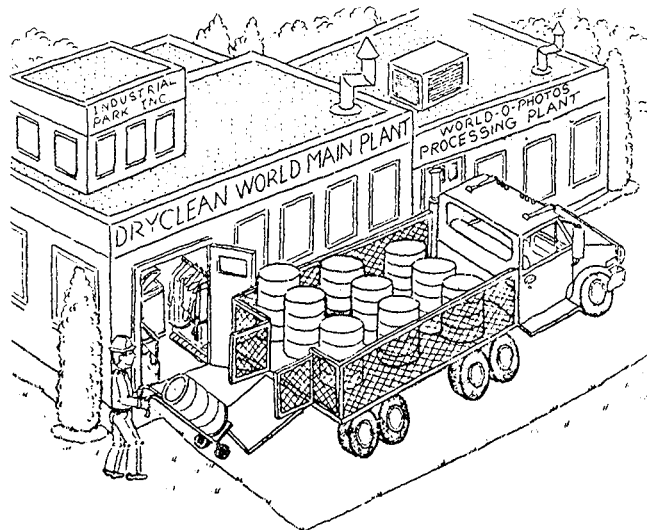
Ignitable wastes start burning easily; includes many solvents and thinners

Reactive wastes are uncommon wastes that react rapidly to give off heat or gases

Note: Radioactive wastes are covered by different laws, and could not be managed at a hazardous waste facility without a special permit.

Where do hazardous wastes come from?

We use hazardous materials, including certain cleaners, paints, glues, and weedkillers or bug sprays, at our homes. When we throw away the leftovers, they are household hazardous wastes, which are exempt from the law. A much larger amount of hazardous waste is produced by businesses and industries, resulting from the hazardous materials used in their processes. For each person in Michigan, this totals about 200 pounds of commercial and industrial hazardous waste generated per year.



Michigan businesses and industries, both large and small, generate many different kinds of hazardous wastes. Typical examples are:

Acids from making and cleaning steel for auto or truck engines and bodies

Metal sludges from plating of auto parts and metal products, and from making steel

Solvents from auto painting and repairs, making paint, printing, general manufacturing, dry cleaning, and laboratories

The management of commercial, industrial, and other hazardous waste is governed by Part 111, Hazardous Waste Management, of Michigan's Natural Resources and Environmental Protection Act, Act 451 of 1994, as amended.

How might a facility affect its neighborhood?

Positive effects on a community may include:

- Providing needed waste management for industries in the community
- Offering new employment at the waste facility
- Increased property tax revenues, compared to vacant or abandoned property
- Compensation and incentives that may be provided by the facility owner

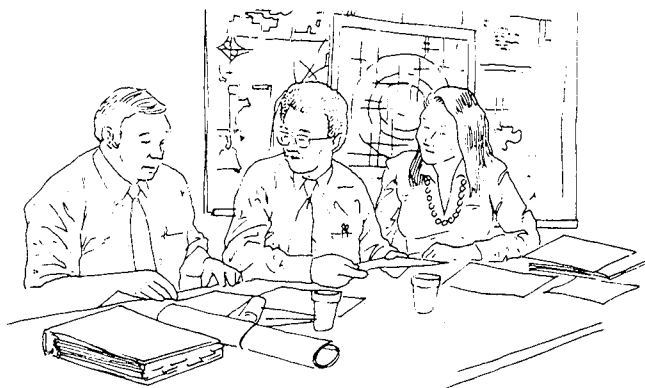
Negative effects on a community may include:

- Uncertainties about impacts of a facility on air, water, or groundwater quality
- Concern about safety or about risk of accidents
- Undesirable impacts from traffic, noise, odors
- Economic impacts on emergency service costs or nearby property values
- Social impacts on community planning, self-image and appearance

Are some methods of waste management better than others?

Waste reduction and recycling, where they are possible, are preferable because they cut the amount of hazardous waste. **Waste reduction** through in-plant process changes can save money for the company producing the waste, but not all processes can be changed to avoid wastes. **Recycling** is possible with certain types of hazardous waste, mainly solvents, metal solutions and sludges, or oils. Thus, it is not possible to totally avoid producing wastes, and safe waste management facilities are needed.

The next best choice is the **treatment** of suitable wastes, in order to reduce the level of hazard or the amount of waste. **Incineration** may also be a good choice because it destroys the waste, but it is costly and emissions must be carefully controlled. **Landfilling** is the least desirable method because the waste remains indefinitely; however, in some cases there is no other option.



How can potential negative effects be avoided?

Mitigation is a **change** in the physical design or the operation of the facility, to avoid negative environmental effects. Examples are:

- Improve air and water pollution control devices
- Decrease size of facility; buy more buffer land
- Screen with plantings; warning signs on fence
- Change operating hours or waste hauling routes
- Restrict types of wastes allowed or their sources

Compensation is **repayment** by the facility owner for costs to the community that cannot be avoided by mitigation. Examples are:

- Pave roads, provide community emergency equipment or training
- One-time payments to community; ongoing fees paid to community based on amount of waste
- Guarantee purchase of adjacent properties
- Train and pay an inspector hired by community

Incentives are **extra benefits** offered in return for accepting a facility. Incentives may be negotiated by the community. Examples are:

- Clean up abandoned waste site in the community
- Donation for public park, or to charities or schools
- Sponsor a local environmental or economic improvement group
- Provide free waste disposal for local residents

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Development of this guide in 1990 was made possible by grants to the East Michigan Environmental Action Council (EMEAC) from the Ruth Mott Fund and the Michigan Department of Natural Resources.

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What is the Site Review Board process?

This is Michigan's process for deciding whether or not a proposed hazardous waste management facility should be built. The final decision is made by the Michigan Department of Environmental Quality based upon recommendations of a 10-person Site Review Board (SRB). The Board receives and studies the facility proposal, and holds a public hearing and other meetings to obtain information from the public and from experts. The law requires the SRB to recommend changes in the facility proposal in response to the concerns and objections of the public. The SRB also oversees formal negotiations between selected community representatives and the applicant who proposes the facility. A Site Review Board must make its recommendation within six months of its first meeting.

Who are the Site Review Board members?

The Site Review Board represents both local and state concerns. The municipality and the county where the facility is proposed each appoint one member to the SRB. The Governor appoints a non-voting chairperson and seven voting members as follows: two public representatives, a municipal representative, a manufacturing industry representative, a geologist, a chemical engineer, and a toxicologist. Staff for the SRB is provided by the Michigan Department of Environmental Quality (DEQ).

Simplified Time Line

Day 0	Applicant submits to DEQ
Day 60	DEQ holds public hearing
Day 120	DEQ rejects application, or DEQ starts SRB process
Day 195	SRB holds public hearing
Day 210	Formal negotiations can start, after SRB lists issues
Day 300	Negotiation process ends
Day 330	SRB recommends action to DEQ (180 days after first meeting)



Why is a facility proposed for any specific site?

A site is selected by a company or agency desiring to build a facility. The applicant, usually private industry, selects a particular site based on market studies and other business information. Sites are not selected by the Michigan Department of Environmental Quality or the Site Review Board.

How is the Department of Environmental Quality involved?

A proposal for a facility is first submitted to the Michigan Department of Environmental Quality (DEQ). The application often contains several notebooks of information, which the DEQ reviews for completeness. The DEQ then determines whether the completed application meets the technical requirements of the law for the facility's construction, operation, and protection of health and the environment. The DEQ holds a public hearing, and may ask the applicant to make changes in the proposal to mitigate negative effects. Within 120 days (4 months) of receiving a complete application the DEQ must decide whether to reject the application or, if acceptable, start a Site Review Board process.

What decisions have Site Review Boards made?

Since 1979, seven facility proposals have gone to Site Review Boards in Michigan. Three proposals have been turned down, including a landfill, an incinerator, and a treatment facility. Four proposals have been approved, including two treatment facilities, an incinerator, and a landfill. Michigan facilities operating before 1979 did not go through the SRB process, but they must meet other requirements of the law.

How should the community respond?

Citizens and local government working together as an organized group will greatly improve the results for the community. It is important to **begin just as soon as possible**, since there is only a limited time.

- Form a coalition of citizens, community groups, and local government; select spokesperson(s)
- Study the proposal (copies in public locations); ask questions of DEQ staff and get expert advice
- Develop a list of specific concerns about impacts on the community
- Inform citizens and groups about important concerns and public meetings; contact newspapers
- Give specific, well-informed, written statements at SRB meetings; plan the presentations in advance
- Choose a representative who can be empowered to negotiate on behalf of the community coalition

Can the community keep out a proposed facility?

Citizen groups should **speak at the public hearings**, after becoming informed about the actual proposal. The DEQ and the SRB must each hold a hearing, at a different time. The SRB knows that hazardous waste facilities are unpopular, so it is not a good use of time to simply say that you are opposed. It is important to give the DEQ and the SRB reasons why the proposal should be denied, and to show possible negative effects. The law states that local regulations may not prohibit a facility, but local ordinances can control design and operating features to make a facility more acceptable in the community.

Can a proposal be changed?

At the public hearing and other meetings of the SRB, citizens should tell the Board their concerns about a proposed facility, so that changes can be made. It is very helpful to the Board if the citizens can suggest specific changes related to their concerns. The types of changes usually required by the SRB are **mitigation** of negative effects or **compensation** for costs to the community. Examples are listed on the second page.



What role does local government have in the process?

- The governments of the city/township and the county where the facility is proposed will each be asked by the DEQ to appoint a Site Review Board member to represent local concerns on the Board.
- Local government should be encouraged to be part of the community response working group.
- The local government should inform the SRB about local ordinances or regulations on planning, construction, or operation of industrial or waste management facilities.
- The SRB will ask the city/township and county to send representatives to the formal negotiations.

When and how does formal negotiation take place?

After the public hearing, the Site Review Board will list all the issues which have been brought up and select the issues to be formally negotiated. The SRB will name the community groups to take part in negotiations with the facility applicant. The county and the city/township will also send members to the negotiating team. Since it is possible that the facility will be built, the community should view the formal negotiations as a way to gain maximum benefits. The community and local government representatives should list the **mitigation**, **compensation**, and **incentives** they are seeking. A negotiated agreement must be finished within the specified time limit. If requested, a professional mediator can be provided.

For more information and references for citizens and local governments, call:

- East Michigan Environmental Action Council, (248) 258-5188
- Waste Management Division, Department of Environmental Quality, (517) 373-2730
- Environmental Assistance Center, Department of Environmental Quality, 1-800-662-9278